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Preface



Drought is a complex, pervasive natural hazard which produces a large number of socio-economic impacts stemming from the integral role of water for the production of a wide array of goods and services. Direct impacts of drought include reduced crop, rangeland, and forest productivity; reduced water levels; increased fire hazard; reduced energy production, reduced opportunities and income for recreation and tourism, increased livestock and wildlife death rates; increased risks of land degradation; and damage to wildlife, forests and fish habitat. A reduction in crop production usually impacts the livelihood of local populations resulting in less income for farmers, hunger, increased food prices, unemployment, and migration.

There is growing evidence that the frequency and extent of droughts have increased as a result of global warming and that the context of current droughts calls for pro-active actions to be able to cope with the imperatives associated with them. Responses to droughts in most parts of the world are generally reactive, responding to drought after impacts have taken their toll. This approach – commonly referred to as crisis management – is known to be untimely, poorly coordinated, ineffective and disintegrated. Despite the repeated occurrences of droughts throughout human history and their large impacts on different socio-economic sectors, no concerted efforts have ever been made to initiate a dialog on the formulation and adoption of pro-active national drought policies. Without a well coordinated national drought policy response that comprises effective monitoring and early warning systems to deliver timely information to decision makers, effective impact assessment, pro-active risk management measures, and preparedness plans that incorporate emergency response programmes, aimed at increasing the coping capacity and reducing the impacts of drought, nations will continue to respond to drought in a reactive, crisis management mode.

The goals of national drought policies are:

- Proactive mitigation and planning measures, risk management, public outreach and resource stewardship as key elements of effective national drought policy.
- Greater collaboration to enhance the national/regional/global observation networks and information delivery systems to improve public understanding of, and preparedness for, drought impacts.
- Incorporation of comprehensive governmental and private insurance and financial strategies into drought preparedness plans.
- Recognition of a safety net of emergency relief based on sound stewardship of natural resources and self-help at diverse governance levels.

- Coordination of drought programmes and response in an effective, efficient and customer-oriented manner.

In order to address the issue of national drought policy, the World Meteorological Organization (WMO) Congress, at its 16th Session held in Geneva in 2011, recommended the organization of a “High-level Meeting on National Drought Policy (HMNDP).” In parallel, the Conference of the Parties of the United Nations Convention to Combat Desertification and Drought (UNCCD) at its 10th session held in 2011 in Changwon, Republic of Korea welcomed such decision of the 16th WMO Congress. The Member Countries of the Food and Agriculture Organization of the United Nations (FAO) have also requested the Organization for support in addressing drought issues since the year 2000. Accordingly, WMO, the Secretariat of UNCCD and FAO, in collaboration with a number of UN Agencies, International and Regional Organizations and National Agencies, organized the HMNDP in Geneva from 11 to 15 March 2013. HMNDP was sponsored by the African Development Bank (AfDB); the Ministry of National Integration (MI), Brazil; the Center for Strategic Studies and Management, (CGEE), Brazil; the China Meteorological Administration (CMA); the OPEC Fund for International Development (OFID); the National Oceanic and Atmospheric Administration (NOAA); the Ministry of Foreign Affairs, Government of Norway; Saudi Arabia; the Swiss Agency for Development and Cooperation (SDC) and the United States Agency for International Development (USAID). The theme of HMNDP was “Reducing Societal Vulnerability – Helping Society (Communities and Sectors).”

Four hundred and fourteen participants from 87 countries as well as representatives of International Organizations, Regional Organizations and UN Agencies participated in the HMNDP. The event was organized in two parts, a three and half days of Scientific Segment followed by one and half days of High-level Segment. His Excellency Mr. Brigi Rafini, Prime Minister of the Republic Niger chaired and addressed the opening of the High-Level Segment of the Meeting, with supporting keynote addresses by the Secretary General of the United Nations; HE Mr. Jakaya Mrisho Kikwete, President of the United Republic of Tanzania; His Royal Highness the Prince of Orange, Chair of the UN Secretary-General's Advisory Board on Water & Sanitation (UNSGAB); Prof. Dr. Bernard Lehmann, Director General, Swiss Federal Office of Agriculture; and other dignitaries. The Ministerial Segment which was addressed by ministers from different parts of the world was chaired by Hon. Robert Sichinga, Minister of Agriculture and Livestock of the Republic of Zambia. His Excellency Mr. Nicholas

Tasunungurwa Goche, Honorable Minister of Transport, Communication and Infrastructural Development, Zimbabwe and Chair of the African Ministerial Conference On Meteorology (AMCOMET) chaired the opening session of the Scientific Segment.

The Scientific Segment of HMNDP addressed seven major themes relevant to the National Drought Policy in 15 different sessions, including seven plenary sessions, two round table discussion sessions and six parallel sessions. Nineteen invited speakers made presentations on specific topics in these sessions and 28 experts from around the world served as discussants. Fourteen papers presented during the Scientific Segment and a final paper on the Summary and Major Outcomes of HMNDP, including the HMNDP Declaration, were reviewed and revised for publication in this volume. These papers covered key issues such as the role of national drought policies; early warnings and drought risk management; multiyear to decadal drought predictability; vulnerability and policy relevance to droughts; drought preparedness and drought mitigation with specific examples from institutions such as the CILSS Regional Center AGRHYMET, the

International Federation of Red Cross and Red Crescent Societies and the Global Water Partnership; and initiatives taken at the national level in Australia, Brazil and Mexico in constructing a framework for national drought policies. The last paper presents recommendations made on the basis of the discussions and the outcomes of the various sessions during the scientific segment.

The editors thank all the authors for their outstanding contributions to this volume. We hope that the different technological, institutional and policy issues addressed by the authors in their papers will help in the development and implementation of drought policies at the national level to more effectively manage droughts and build societal resilience.

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Editors